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ABSTRACT

2 Invert emulsion compositions including an oleaginous, a non-oleaginous and an
3 amine surfactant that are useful in the oil and gas well drilling art are disclosed. The
4 amine surfactant is selected so that the invert emulsion can be converted from a water-in-
5 oil type emulsion to a oil-in-water type emulsion upon the protonation of the amine
6 surfactant. Deprotonation of the amine surfactant reverses the conversion. This solution
7 also permits the conversion of oil-wet solids in the fluid into water-wet solids.